Generating Efficiencies in Michigan's Aviation Programs

As we work through our funding challenges we are presented with a unique opportunity to hone our approach to addressing transportation needs. Efficiencies have been realized in a number of areas which have helped not only realize budgetary savings, but build a better aviation system for the state.

Airport Pavement Management System

In an effort to objectively quantify the condition of our airport runway and taxiway pavement, MDOT, with assistance from Applied Pavement Technologies, Inc. set about developing the Airport Pavement Management System (APMS).

The APMS compliments the Michigan Airport System Plan by providing a valuable asset management function.

Specifically, the APMS enables MDOT to:

- Objectively monitor the condition of the pavement system
- Select more cost-effective maintenance and repair treatments
- Extend pavement life through the application of preventive maintenance actions, such as crack sealing and joint sealing
- Track the performance of selected treatments
- Provide information needed to justify and secure funding
- Show the impact of funding decisions
- Assure best return on investment
- Communicate pavement conditions and needs
- Assist Michigan airports in meeting federal requirements for implementing a pavement maintenance management system

To save major rehabilitation cost, **the Subcommittee has recommended that MDOT reinforce the requirement that airports maintain and closely follow their pavement management plan**. Compliance with this requirement should be a consideration as MDOT prioritizes pavement rehabilitation projects during the funding allocation process. The Subcommittee believes it is important that airports do everything they can to preserve their existing pavement if they are to be

considered a candidate to receive funding to reconstruct their runways or other infrastructure.

Also, while not specifically addressed in the plan, **the subcommittee has recommended that consideration be given to the future use of emerging technologies in pavement management.** Of particular interest is the automated evaluation of pavement condition through the use of pavement imaging software and vehicle mounted pavement survey equipment. Future use of these systems for airports could further enhance the objectivity and accuracy of pavement data compared to the manual system in use today. It would also allow a more frequent inspection cycle.

Michigan Airport System Plan

The Michigan Airport System Plan (MASP) provides another important asset management tool. The MASP greatly increases MDOT's efficiency in planning projects by categorizing airports in a tier-based prioritization system. The MASP enables maximum return on MDOT's investment dollars which is particularly important given the current funding shortage.

The Subcommittee has recommended that the majority of State and Federal funds should be allocated to the most important airports in the state. Therefore, a minimum of 95% of State and Federal funds should be used on the Tier 1 and Tier 2 airports. These two tiers represent approximately 95 of the 235 public use airports.

MiDEAL

MiDEAL (Michigan Delivering Extended Agreements Locally) is a program to allowing local units of government to benefit from the State's negotiating and purchasing power by permitting them to purchase from the state's contracts on the same terms, conditions, and prices. This program allows airport owners (if they are governmentally owned) to purchase airport maintenance equipment and supplies at reduced costs. They also enjoy a simplified procurement process.

Processing of Federal Funding

Unfortunately, the state's process of authorizing federal Airport Improvement Program funds is one area that has traditionally been less than efficient.

As mentioned in the CAC Aviation Subcommittee Report, Michigan benefits from our status as a block grant state since we enjoy a great

deal of discretion in determining our airport funding priorities. Block grant status also streamlines the management of airport development projects. However, as part of that process, authority to utilize federal funds allocated to Michigan airports must be given by the state legislature in the form of a Capital Outlay Appropriation. As this is primarily an authorization to utilize federal funding, it should be a simple "pass through" function.

However, as currently structured, the capital outlay budget includes not only airport improvement projects but unrelated funds for university and community college programs. As such, the airport capital appropriations have become intertwined with a drastically more controversial authorization process. The resulting delays have endangered Michigan's airport infrastructure and our ability to compete with neighboring states for substantial federal funding. It's worth noting that airport capital projects are the only transportation projects appropriated via Capital Outlay.

The Subcommittee has recommended separating these airport project funds from the Capital Outlay process and moving them into the Transportation Appropriation Budget. In addition the Subcommittee recommends establishing "firewalls" to help protect state airport funding from being used for non-aeronautical purposes.

Accordingly, a legislative effort is currently underway to shift aviation funding into the transportation budget for FY2009.

Construction Time Frame

Another continual challenge is the extended amount of time necessary to complete airport projects. As an example, construction of a new runway takes approximately 10 years, on average, from concept development to project completion. This hampers our ability to address aviation needs in a flexible and timely manner.

The Subcommittee has recommended that MDOT continues efforts to improve efficiency by enhancing coordination between local, state, and federal agencies. This helps to streamline the construction process by eliminating redundancies and improving communication/information flow.

Elimination of State Local Programs

In an effort to preserve programs that leverage federal funds, several state/local programs were not funded or funded at a greatly reduced level. These include:

- ❖ Air Service Program
- ❖ All Weather Airport Access Program
- ❖ Pavement Marking and Crack Sealing Program
- ❖ Airport Rescue and Fire Fighting Training Program

The Subcommittee has recommended reinstatement of these programs if additional funding becomes available.

Agency Efficiencies & Cost Savings

The Subcommittee has examined the efficiencies that have been recently implemented by the department to reduce costs. The Subcommittee found that MDOT has realized substantial efficiencies in its aviation program administration by:

- ❖ Reducing overall aviation staffing in the Bureau of Aeronautics and Freight Services (BAFS). Since 1993, the number of full time employees has been reduced from 79 to 48 despite increases in program size and scope
- ❖ Leveraging federal funds for salaries of staff working on airport projects
- ❖ Nearly eliminating out-of-state business travel
- ❖ Renegotiated printing contracts for additional cost savings
- ❖ Substantially reducing overtime pay (despite above-described reductions in staffing)
- ❖ Increasing intervals between airport safety inspections from an annual basis to every third year
- ❖ Halting publication of the "Michigan Aviation" newsletter to realize additional cost saving
- ❖ Reducing subscriptions to trade publications, reference material, and airline scheduling databases
- ❖ Replacing energy consumption with facility improvements such as energy-efficient lighting ballasts and compact florescent bulbs

While not all-inclusive, this summary provides an indication of the extensive cost control measures and program improvements implemented to address budget shortfalls.

With funding reductions at critical levels, additional efforts will be needed to improve efficiencies even further if additional funds are not

found. However, we must recognize the potential impact of these continued reductions on the safety and services available to users of Michigan's aviation system.